

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

# 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

7-5-05

Mr. Craig Wallwork, Project Manager Armed Forces Retirement Home 3700 North Capitol Street, NW Washington, DC 20011

Re: Armed Forces Retirement Home - Washington Master Plan (CEQ # 20050199)

Dear Mr. Wallwork:

In accordance with the National Environmental Policy Act of 1969 and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the Armed Forces Retirement Home in Washington, D.C. As a result of this review, EPA has assigned this DEIS a rating of EC-2 (Environmental Concerns/Insufficient Information), which indicates that we have environmental concerns regarding the proposal and that there is insufficient information in the document to fully assess the environmental impacts of the project. A copy of EPA's ranking system is enclosed for your information.

EPA understands that the purpose of the proposed project at the Armed Forces Retirement Home-Washington (AFRH-W) is to create a master plan that will sustain the AFRH-W and its Trust Fund which is its primary source of funding. As stated within the DEIS (page i), AFRH and the U.S. Congress have identified the need for revenue which could be created by development of the AFRH-W. Also noted in the DEIS is that "Private or governmental development on the AFRH-W would occur primarily through leases or sales. The decision to lease or sell will be made based on economic analysis, and is not part of this EIS."

## **General**

Although EPA recognizes the purpose and need for the proposed project, it is not certain that the extensive degree of development proposed is justified as current use and projected future use of the property is not included in the DEIS. The DEIS states that the "site is currently underutilized" but does not provide an analysis of the possible reasons for this other than the presumed assumption that there is undeveloped open space that can be developed to support community needs/amenities as well as provide revenue. It is not apparent that the residents were poled to determine what their needs are as well as if there is the demand to occupy the site with residents and tenants to support residential/hotel/medical/institutional/retail, etc. development that is proposed. Also, aside from the Grant Building and the King Hospital Complex, it is not certain whether other existing buildings would benefit from renovation/demolition, etc. which

may then help to support and increase revenue. An assessment and inventory of existing buildings as well as their uses would provide a baseline and may serve to decrease the build alternatives which would reduce environmental and cultural resource impacts.

To have a better understanding of the potential environmental impacts that may result from the proposed alternatives, EPA has the following comments which we would like to see addressed in the Final Environmental Impact Statement (FEIS).

### **Cultural Resources**

As indicated in the DEIS, the AFRH-W is a National Register-Eligible Historic District. The master plan alternatives would have direct, long-term, major, adverse impacts to cultural resources and the historic district. The pristine areas that characterize the AFRH-W area and that are associated with and represent historical significance will be lost due to the proposed development. Additionally, new construction would likely alter the historic context of individual buildings and building groups. Cultural landscape features would be disrupted or lost entirely.

In addition, the proposed alternatives could potentially affect historic properties outside of the AFRH-W. The historic properties outside of the AFRH-W are discussed within the DEIS. However, a map depicting their location in relation to the AFRH-W would be helpful in determining their proximity to cultural resources within the AFRH-W site.

Although a Programmatic Agreement is being developed that will identify mitigation measures as well as design guidelines for the defined character areas, the loss of cultural areas is great and permanent. The DEIS does not propose scaling down the proposed developed areas to retain some (or all) of the intact character areas nor to preserve the open space/meadows or the historic cultural landscape. Thus, of the alternatives proposed, there is no significant difference in the degree of impact.

Page 3-35, Character Area 5: Pasture, states that "The Pasture represents the natural agricultural landscape that was once vitally important to the self-sustaining farming activities on the site and illustrates the 19<sup>th</sup> century pastoral appearance of its once active farming lands." Prime and unique farmland impacted by the project should be delineated regardless of the current state of cultivation. These efforts should be coordinated with the National Resources Conservation Service. Impacts to prime and unique farmland should be avoided. However, if this is not possible, the FEIS should explain the implications of developing the prime and unique agricultural land with respect to the Farmland Protection Policy Act as well as describe the mitigation measures for those impacts.

# Stormwater Management/Wetlands

Page 3-3 of the Wetlands Section states that the largest drainage area on the AFRH-W, approximately 105 acres, drains into two ponds in the southwest corner of the site via a paved flume. The second largest drainage area, approximately 65 acres, flows north to south through the center of the campus via a paved flume and storm sewers. "Prior to any disturbance of these areas, a Jurisdictional Determination (JD) from the USACE would be needed to determine if these features are considered waters of the U.S. and therfore under the USACE's jurisdiction." Page 4-10 states that "Where possible, the open channel systems on the AFRH-W campus should be utilized to alleviate additional loads on the combined sanitary/stormwater sewer system." However, jurisdiction determination of the channel systems may prevent utilization as a stormwater management system.

It is the recommendation of the EPA to discourage the utilization of non-tidal wetland systems for stormwater treatment and management. Numerous studies have shown that siting these facilities in wetlands leads to the degration of aquatic ecosystems by contributing to thermal pollution and downstream warming. Furthermore, an in-stream stormwater management and water quality treatment facility will alter hydrology, and increase erosion and sedimentation rates. Retaining stormwater and changing the natural flow rate will alter the natural level of the water table and change the surrounding wetlands vegetation. Water temperature, habitat composition, and food availability are all directly affected when streamside vegetation is lost. Stormwater management structures in wetlands will not prevent pollutants such as fertilizers, pesticides, spills, sediment, and urban contaminants such as bacteria, heavy metals and petroleum from automotive activities, from entering the surface waters since the structures are already in the surface water. Wetlands are important components to the aquatic ecosystem that provide flood flow desynchronization, maintenance of water quality, habitat and nutrient uptake functions. EPA's mandates include the preservation of these environmentally significant values and functions.

#### Low Impact Development

Page 4-13 states, "The stormwater storage requirement for the site can be satisfied with stormwater management ponds, underground storage pipes or concrete structures built in conjunction with quality control structures, or a variety of urban Best Management Practices (BMPs)." Although low impact best management practices such as bioretention facilities, infiltration trenches, dry wells, and rock trench level spreaders are proposed to reduce the effects of stormwater, it is important to note that stormwater ponds and other stormwater facilities do not replicate natural systems, which greatly slow water before it reaches streams, wetlands and other waters. Development results in the loss of trees and other vegetation, the compaction of soils by heavy equipment and the creation of vast stretches of connected impervious areas. These combined factors are extremely difficult to compensate for using traditional practices. Prior to the development of any structural stormwater practices on a site, significant reductions in stormwater quantity and quality impacts can be made through enhancements to site design. As s

result, site design goals and planning practices should be used to minimize stormwater impacts. The following web sites will provide you with goals and practices and additional information: <a href="http://www.epa.gov/owow/nps/lid\_hydr.pdf">http://www.epa.gov/owow/nps/lid\_hydr.pdf</a>; <a href="http://www.epa.gov/owow/nps/lidnatl/pdt">http://www.epa.gov/owow/nps/lidnatl/pdt</a>; <a href="http://www.epa.gov/ednnrmrl/">http://www.bmpdatabas.org</a>; <a href="http://www.epa.gov/ednnrmrl/">http://www.epa.gov/ednnrmrl/</a>.

## Terrestrial Biota

The DEIS states that portions of forested areas, mature trees, and meadow habitats would be replaced with developed areas. The FEIS should provide a complete description of the terrestrial habitat resources in the study area. Complete species lists for mammals, birds, amphibians, reptiles, and plants present in the study area should be provided. The composition and characteristics of each community type should be summarized and the functions and total acreage indicated. In addition, the species should be mapped relative to habitat locations and species density.

To determine the baseline value of the habitat and the severity of the potential impacts from the proposed project, EPA recommends that a baseline Habitat Evaluation Procedure (HEP) be completed on the study area using the U.S. Fish and Wildlife Services's Habitat Evaluation Procedure. If the impacts of the wildlife and terrestrial habitat are unavoidable, the HEP will help to determine the type of mitigation measures which would be considered appropriate for the potential impacts.

Measures to avoid potential adverse impacts to these resources should be evaluated and implementation and mitigation plans to minimize impacts should be developed. Where such impacts cannot be avoided, adequate compensation developed through habitat assessment must be implemented.

#### Aquatic Biota

Although it was noted on page 3-7 that crappie, bass, and catfish are species found in the two fishing ponds, the fish and benthic invertebrates in the ponds within the study area should be surveyed. An analysis of both fish and benthic communities should be conducted to determine the quality and function of the aquatic biota. The purpose of the survey is: 1) to detect impairment of aquatic biota, 2) to assess the relative severity of the impairment, 3) to prioritize sites for more intensive evaluations, and 4) to define baseline conditions and documenting recovery from impairment following mitigation actions.

The loss of forested areas and open spaces combined with an increase in impervious surfaces lends itself to more pollutants entering the ponds. Reduced nutrients to streams, affects food supply for fish, etc. Therefore, specific mitigation measures must be outlined to alleviate adverse effects to the aquatic biota present in the ponds.

Thank you for the opportunity to review and comment on this project. If you need additional assistance, the staff contact for this project is Karen DelGrosso; she can be reached at 215-814-2765.

Sincerely,

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William Arguto NEPA Team Leader

Enclosure